

Schwarzbier

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **25**
- SRM **23.6**
- Style **Schwarzbier**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **11.9 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------------|------------------|-------|------|
| Grain | Pilzneński | 1.3 kg (43.5%) | 81 % | 4 |
| Grain | Monachijski | 1.437 kg (48.1%) | 80 % | 16 |
| Grain | Strzegom Karmel 600 | 0.1 kg (3.3%) | 68 % | 601 |
| Grain | Weyermann - Dehusked Carafa III | 0.15 kg (5%) | 70 % | 1024 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------|--------|--------|------------|
| Boil | Tradition | 10 g | 5 min | 5.5 % |
| Boil | Tradition | 10 g | 20 min | 5.5 % |
| Boil | Tradition | 17 g | 60 min | 5.5 % |